## METHODS FOR FORMING CONDUCTIVE STRUCTURES AND STRUCTURES REGARDING SAME

## **Abstract of the Invention**

A method for forming a metal/metal oxide structure that includes forming metal oxide regions, e.g., ruthenium oxide regions, at grain boundaries of a metal layer, e.g., platinum. Preferably, the metal oxide regions are formed by diffusion of oxygen through grain boundaries of the metal layer, e.g., platinum, to oxidize a metal layer thereon, e.g, ruthenium layer. The structure is particularly advantageous for use in capacitor structures and memory devices, such as dynamic random access memory (DRAM) devices.

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I hereby certify that the Transmittal Letter and the paper(s) and/or fee(s), as described hereinabove, are being deposited with the United States Postal Service 'Express Mail Post Office to Addressee' service under 37 C.F.R. 1.10 on the date indicated above and is addressed to the Assistant Commissioner for Patents, Mail Stop PATENT APPLICATION, P.O. Box 1450, Alexapdria, VA 22313-1450.

SARA E. OLSON

3HB ( 6. 6686)